

EXHIBIT 1

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DEPARTMENT OF JUSTICE

INTEROPERABILITY BETWEEN ANTITRUST AND INTELLECTUAL PROPERTY

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Good afternoon and thank you for inviting me today. I also extend a special thanks to our foreign guests for taking the time to come to today's event. Their presence does more to illustrate the importance of this conference's topic, antitrust issues in the global marketplace, than anything I might say this afternoon.

My remarks today focus on intellectual property in the global antitrust arena and certain difficulties with applying the concept of "dominance" to the market power that successful companies sometimes gain by creating new technologies and IP rights. In particular, regulatory second-guessing of private firms' solutions to technological problems, which I perceive to be on the increase, threatens to harm the very consumers it claims to help. To address this topic, I will start with some first principles on innovation and consumer welfare and then expand on the issues in the context of a specific example. Next, I will offer some general principles to guide the antitrust analysis of dominance and single-firm conduct. Finally, I will address what I consider to be a related topic: process integrity and the importance of carefully designing, and complying with, legal orders.

I. Intellectual Property and Dynamic Efficiency

Let me begin, briefly, with first principles and some basic innovation economics. Antitrust and intellectual property policy are complements in that both seek to create a set of incentives to encourage an innovative, vigorously competitive marketplace that enhances efficiency and improves consumer welfare.⁽¹⁾ This concept of efficiency is crucial to understanding how IP law interacts with the world of antitrust.⁽²⁾ To some, "efficiency" can mean static efficiency, which occurs when firms compete within an existing technology to streamline their methods, cut costs, and drive the price of a product embodying that technology down to something close to the cost of unit production. Static efficiency is a powerful force for increasing consumer welfare, but economists tell us that an even greater driver of consumer welfare is dynamic efficiency. Dynamic efficiency refers to gains that result from entirely new ways of doing business. The Austrian economist Joseph Schumpeter explained dynamic efficiency as:

... competition from the new commodity, the new technology, the new source of supply, the new organization ... competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.⁽³⁾

A more colloquial term for dynamic efficiency, but a helpful one, is leapfrog competition — competition that does not merely improve upon old methods, but leaps ahead into something new.

It follows from the Schumpeterian view that antitrust law, with its focus on improving consumer welfare, has a keen interest in protecting innovation. Fostering innovation requires recognition of the benefits of dynamic efficiency and the dangers of focusing myopically on static efficiency. The same forces that yield the benefits of static efficiency — conditions that encourage rivals quickly to adopt a new business method and drive their production toward marginal cost — can discourage innovation (and thus dynamic efficiency) if the drive toward marginal costs occurs at such an early stage that it makes innovation uneconomical. Where innovation requires substantial up-front research and development (R&D) costs, a rational firm will elect not to innovate if it anticipates a selling environment that too quickly resolves to marginal cost of production. This problem is sometimes described as the need to recoup R&D costs and an expected profit sufficient to induce firms to direct their capital to risky R&D ventures.

Seen in this light, strong intellectual property protection is not separate from competition principles, but rather, is an integral part of antitrust policy as a whole. Intellectual property rights should not be viewed as protecting their owners *from* competition; rather, IP rights should be seen as encouraging firms to engage *in* competition, particularly competition that involves risk and long-term investment. Properly applied, strong intellectual property protection creates the competitive environment necessary to permit firms to profit from their inventions, which encourages innovation effort and improves dynamic efficiency.

Such a competitive environment is, to use an old cliché, the goose that lays golden eggs. Nurturing such an environment has created innumerable golden eggs in the U.S.: the telephone, the phonograph, light bulbs, lasers, computers, television, and countless new drugs and medical devices. Once these breakthrough inventions exist, however, it can be tempting to carve up the benefits and spread them around the economy. When Christmas dinner approaches, it is tempting to think, why not carve up the goose itself? We can find fault with the goose: she ought to be laying more eggs, and she might even be keeping an egg or two for herself. But we all know the moral lesson to this story. When you kill the goose, you end up without the eggs, and you quickly learn that the one big meal was not worth the long term cost.

Even in a competitive economy with sound antitrust laws, we cannot take capital-intensive innovation for granted. In a speech called "Competition and the End of Geography,"⁽⁴⁾ which I commend to you, my predecessor as Assistant Attorney General, Hew Pate, described a view that threatens to kill the proverbial goose. He explained that the traditional view of intellectual property as property, which he called the "asset faction," is under attack from the "access" and "redistribution" factions, which seek to limit or

abolish copyrights and patents in order to make it easier to copy music, computer programs, drugs, and medical technology. Increasingly, these access and redistribution factions see "dominance" by successful innovators, meaning large market share, as a problem to be solved, and antitrust and consumer protection law as the solution.

II. A Cautionary Tale for Applying "Dominance" to IP Rights

Access and redistribution can be a tempting "Christmas dinner" under a short term, static view, but this is ultimately misguided. The temptation persists even where the innovation has solved a vexing problem that everyone admits used to exist, and even where consumers flock to the innovation despite the availability of alternatives. I would like to illustrate this problem today with a discussion of Apple's iPod and iTunes, based on my general understanding without purporting to be an expert in the field.

A. Napster, Grokster, and the Rise of iTunes

Apple's iTunes music service has (for the moment) solved a problem that some observers, less than five years ago, predicted might never be solved: how to create a consumer-friendly, yet legal and profitable, system for downloading music and other entertainment from the Internet. It is instructive to review the history of the problem. The technical capability to offer digital music over the Internet has existed at least since the early 1990s; nevertheless, digital music first moved online in a significant way only in 1999 with the launch of the Napster centralized file-sharing service. There were major flaws with the early attempts to offer downloadable music: Napster⁽⁵⁾ and Grokster⁽⁶⁾ were based principally on piracy, while recording industry efforts such as "MusicNet" and "pressplay" never achieved wide use and, in addition, were attacked as risking a recording industry monopoly over not just the songs, but technological development as well.⁽⁷⁾ While it battled the music pirates, the music industry suffered huge losses, including a 25% drop in sales from 2001 to 2002, which could be measured in the billions of dollars. Reviewing that bleak picture, the head of the Recording Industry Association of America said in 2002, "I wish I could tell you that there is a silver bullet that could resolve this very serious problem. There is not."⁽⁸⁾

There was no silver bullet — there was, however, a little white box called the Apple iPod. The iPod was not an immediate success. When Apple announced the iTunes music service in January 2001, it was a software service without a device to match, and it worked only with Apple's computers. It took Apple almost a year to ship the first iPods, in late fall 2001, and again, iPods worked only with Apple's products. Sales were small. Apple did not offer the first PC-compatible iPod until July 2002, and even then the devices worked only with Apple's preferred FireWire port, not the USB 2.0 ports that are far more common on PCs, and the PC-compatible iPods connected only to the MusicMatch music service, not Apple's iTunes. Compatibility problems plagued the PC-iPod and hurt its sales. So by early 2003 — four years after the launch of Napster — there still was no clear legal, consumer-friendly solution. Many were trying, including Microsoft, which announced in March 2003 that it was entering the market with its "Media2Go" portable video and audio players, but no one had achieved real success.

The real revolution began in April and May 2003 when Apple unveiled the "third generation" iPods, which were directly compatible to USB 2.0 ports, and provided software to offer the same capability to older models. Apple also made all the iPods work with iTunes. These changes were a reaction to the discipline of the market — customer complaints and unsatisfactory sales — and once they were implemented, the reward was swift: suddenly, iTunes passed the mark of one million songs downloaded. In June 2003, Apple sold its one-millionth iPod, and in September 2003, iTunes downloads passed the 10 million song mark. In January 2004, Apple introduced the iPod mini, and several variants followed; online music had truly arrived. But Apple was not the only game in town. Apple's success was a rising tide that lifted many boats, creating what one commentator has called "the iPod effect," meaning that it proved a concept that others quickly imitated:

With the proven success of Apple, the digital download gold rush began. The Big Five [record

labels] began licensing their content to a wide number of entities in the United States and abroad, removing many restrictive music licensing terms A vast array of companies including Amazon, BuyMusic.com, MTV, Wal-Mart, Coke, Dell, Microsoft, Musicmatch, Woolworth's, Virgin Music, Yahoo, Starbucks, and even Oxfam now boast digital music download services for PCs.⁽⁹⁾

So there you have it. There was a history of an intractable problem, characterized by rampant piracy and declining legal sales. After some missteps, Apple's iTunes solved these problems: legal sales boomed; competition against the largest players — the recording industry and Microsoft — increased; the recording industry dropped many restrictive licensing terms; and consumers can now choose from a number of music services and music playing devices, not just the iPod (devices from Dell, iRiver, SanDisk, Sony, and others already exist, and Microsoft recently announced another push for a rival to the iPod, the "Zune"⁽¹⁰⁾). Apple nonetheless enjoys the lion's share of sales. You might think that by creating a product to which consumers have flocked of their own free will and by mitigating the piracy problem, Apple would be cheered for pioneering greater access to music. But you would be wrong. Apple is cheered by many, but by no means all.

B. The "Dominance" and "Interoperability" Attack on Apple iTunes

Apple is now under assault in a number of jurisdictions on the grounds that iTunes is too dominant and does not "interoperate" with devices other than iPods.⁽¹¹⁾ One recent law, for example, may require sales of music or video to operate across a wide range of devices and creates a government body that can require a digital music provider to turn over information relating to its "technological measures" to the extent needed for interoperability with other devices. Some consumer protection agencies have announced that they are considering imposing similar measures through lawsuits.⁽¹²⁾ Interestingly, the interoperable song format that is advocated — MP3 — is a compressed format of generally lower fidelity than iTunes files. So what consumer harm do these regulatory bodies seek to address?

One theory is that consumers are locked into buying songs only from the iTunes service and that they will have to pay too high a price for iTunes songs. But there are two problems with this theory. First, consumers can upload other formats (CD-ROMs and MP3 files) to Apple's devices, so they do not have to buy from iTunes. And while it is true that Apple's digital rights management (DRM) software ensures that the first recording of a song downloaded from iTunes can only play on an Apple device, consumers can re-record an iTunes song in an MP3 format and play it on other devices; in sum, it is hardly clear that they are locked in. Second, it appears that Apple has been depressing per-song prices, not raising them. A senior attorney from the Electronic Frontier Foundation, a proponent of the access faction who served as Grokster's lawyer before the Supreme Court, made the following claim:

The [record] labels are pretty much locked into a system developed by Apple . . . They can't even raise prices beyond 99 cents per song — Steve Jobs simply said 'No.'⁽¹³⁾

That sounds like a benefit to consumers.

Another theory is that Apple is selling songs on the cheap but devices on the dear, and consumers are hurt because they are locked into buying the same expensive devices in the future. The cheap songs/expensive device model may indeed be Apple's strategy. But this type of business model has been criticized in the past because the cheap product was the one that was sold first — think cheap razors and expensive replacement blades or cheap printers and expensive replacement ink.⁽¹⁴⁾ Apple's model is the opposite: consumers buy the expensive iPod device first, then have the option — not the obligation — to use the free iTunes software and buy the cheap iTunes songs.

A third theory is that, darn it, "information just wants to be free." That quote is so much in use on the

Internet that I could not pin down its original source. Wikipedia attributes it first to a participant at a computer hacker's conference in 1984.⁽¹⁵⁾ In any event, this argument is not based on competitive effects and consumer welfare. Information may want to be free, but information creators want to be paid — they will not create without rewards. Indeed, the difficulty of protecting digital information against easy, unlawful misappropriation underscores the need for measures to protect one's investments.

The fourth theory is that Apple may not be hurting consumers, but it is hurting competitors. Apple's products are so successful that competitors want in on the party and see Apple's property as the easiest way to get a piece of the pie. Let's examine this one in a little more detail.

Antitrust law protects competition, not competitors.⁽¹⁶⁾ There are real costs to using antitrust law to protect competitors rather than competition. There is the problem of deterring innovation by the target of the "dominance" attack: if a firm knows it will have to share its intellectual property or be managed by a committee of government regulators, it may not innovate in the first instance. Or, just as likely, it will reduce its further innovation once the product has arrived on the market — either because its returns are diminishing, or because its personnel are forced to spend their time playing defense against the regulators, rather than playing innovation offense in the marketplace.

And there is another problem, perhaps a larger and more pernicious one: if the government is too willing to step in as a regulator, rivals will devote their resources to legal challenges rather than business innovation. This is entirely rational from an individual rival's perspective: seeking government help to grab a share of your competitor's profit is likely to be low cost and low risk, whereas innovating on your own is a risky, expensive proposition. But it is entirely irrational as a matter of antitrust policy to encourage such efforts. Rather, rivals should be encouraged to innovate on their own — to engage in leapfrog or Schumpeterian competition. New innovation expands the pie for rivals and consumers alike. We would do well to heed Justice Scalia's observation in *Trinko*, that creating a legal avenue for such challenges can "distort investment" of both the dominant and the rival firms:

Compelling such firms to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities.⁽¹⁷⁾

Importantly, letting competition in the market drive technological development does not necessarily mean less "access." The market has already disciplined Apple: remember, the iPod and iTunes originally worked only with Apple machines and FireWire ports, but Apple responded to consumer demand and opened up its technology to work on PCs and USB 2.0. The videotape standards struggle between VHS and Sony's Betamax provides another example: when Sony tried to keep tight control over its proprietary Betamax technology, the marketplace swiftly declared VHS the winner. Market discipline can be a powerful force.

My purpose today is not to benefit Apple Corporation. Apple can defend itself. Indeed, I have not undertaken an investigation of Apple's activities. But Apple provides a useful illustration of how an attack on intellectual property rights can threaten dynamic innovation.

C. Dominance and Single Firm Conduct: Some General Principles

I said that I would suggest some general principles for applying antitrust analysis in dominance investigations. I start by acknowledging that the analysis of unilateral conduct is one of the most difficult issues under debate in the antitrust community today; so much so, in fact, that the Department of Justice and the Federal Trade Commission are holding a series of hearings this year with a view toward improving the state of our knowledge in this area.⁽¹⁸⁾ In my remarks to open that conference, I set forth six general principles to keep in mind:

First, individual firms with monopoly power can act anticompetitively and harm consumer

welfare, and we should seek to identify and prosecute such conduct;

Second, mere size does not demonstrate harm to competition or a violation of the antitrust laws; the proper focus of antitrust law is on anticompetitive conduct and effect, not just size or market share;

Third, mere injury to a firm does not itself show that competition has suffered; indeed, a firm's inability to garner sales may indicate no more than the superiority of its competitors' products;

Fourth, both consumers and the business community benefit from clear, administrable, and objective rules; ambiguous rules or rules depending on future unknown events can chill businesses from undertaking procompetitive conduct, such as cutting prices, investing, and innovating;

Fifth, we should construe Section 2 of the Sherman Act to avoid chilling procompetitive conduct because efficiencies are hard to measure and false positives easy to find, and every time a firm is kept from engaging in aggressive conduct because it fears an unnecessarily expansive interpretation of the antitrust laws, competition is harmed; and

Sixth, we should not act unless we can describe a clearly procompetitive, administrable remedy.⁽¹⁹⁾

To these I would add, in the context of a dominance claim against a firm that obtains high market share through superior technology and innovation, a few more specific points:

- We should apply greater skepticism when the complaint about a dominant firm comes almost exclusively from rivals, not consumers, and where the remedy would deprive consumers of a choice.
- We should increase that skepticism when the complaining parties engage in forum shopping, failing to make their case before the first, most obvious jurisdiction or government body before taking their case elsewhere.
- We should avoid involving the government in the detailed re-engineering of products produced by private firms, under the guise of antitrust policy; we should question any claim that government regulators are more competent than private firms and consumers to choose the "best" design for a product, particularly when the "best" design must evolve rapidly to meet changing consumer demands.

As a final consideration in this regard, in a globalized economy, antitrust authorities must be careful to consider the geographic scope of their actions. As the Antitrust Division advocated and the Supreme Court recognized in its 2004 *Empagran* decision, antitrust enforcement that reaches alleged harm outside a country's own borders "creates a serious risk of interference with a foreign nation's ability independently to regulate its own commercial affairs."⁽²⁰⁾ That risk is sometimes manageable, but it would be inappropriate for enforcement efforts against a global firm in one jurisdiction to effectively foreclose a choice of technology in another. To take a specific example, one jurisdiction might have the right to require Apple to strip its iPods of certain functionality, say, the higher fidelity of Apple's proprietary iTunes format. It is one thing for a jurisdiction to deny the benefits of innovation to its own consumers, but it is entirely another thing to seek to deny those benefits to consumers elsewhere.

III. The Importance of Process Integrity and Compliance

I have spent the last few minutes inveighing against certain kinds of government orders that would

damage competition and harm consumer welfare. I turn now to a topic that at first blush might seem unrelated: process integrity. The topic is broader than I have time to cover, so I will focus on compliance issues. I will discuss four guiding principles and their application in three situations this past year.

The compliance process should be guided by four principles:

First, antitrust authorities should ensure that any order is procompetitive, administrable, and clear enough to put the defendant on fair notice of what is required;

Second, persons subject to the order must comply, even during an appeal;

Third, all parties should periodically review the order and, where appropriate, request that it be updated to ensure that the order continues to serve the interests of competition and consumer welfare; and

Fourth, if violations occur, there should be a penalty, but one that is reasonable in light of the particular circumstances.

The Department of Justice has put these principles into practice at least three times just this year. The first example is a consent decree involving Rolex Watch U.S.A. Under a 1960 civil decree, Rolex had agreed to restrictions on its policies regarding the use, resale, and pricing of watch parts purchased from Rolex. The Department found that, despite this order, Rolex had created a written policy of refusing to sell watch parts to independent watch repair facilities or watchmakers unless the watchmakers agreed that they would not use the parts in any watch that had non-Rolex parts or accessories. Rolex's policy also prohibited watchmakers from reselling spare watch parts and from certain types of pricing. When this policy came to the Department's attention, the Department concluded that the policies violated the terms of the 1960 decree. Rolex agreed to a settlement that included a \$750,000 payment. The Department also determined, however, that market conditions and antitrust law had changed so that the consent decree was no longer warranted. Rather than continue with an outdated decree, and notwithstanding the recent violations by Rolex, the Department recommended that the Court terminate the original 1960 decree.⁽²¹⁾

The second example is a gun-jumping matter. Qualcomm and Flarion announced a merger in July 2005 and closed in early 2006 after the Department of Justice declined to challenge the merger. As many of you know, the Hart-Scott-Rodino Act requires companies planning certain transactions to observe a mandatory waiting period before the parties merge. The Department learned that Qualcomm obtained operational control over Flarion without observing the waiting period. The companies' merger agreement required Flarion to seek Qualcomm's consent before undertaking certain basic business activities, such as making new proposals to customers, and Flarion also sought and followed Qualcomm's guidance before making routine decisions, such as hiring consultants and employees. In April, the Department announced a settlement under which the parties agreed to pay a \$1.8 million dollar fine. This was a significant fine, reflecting the important principle that merging parties must continue to operate independently until the end of the premerger waiting period regardless of whether there is harm to competition. The penalty nevertheless represented a substantial reduction from the statutory maximum because the companies voluntarily reported the existence of gun jumping problems to the Department and took some measures to change their contract and their conduct.⁽²²⁾

The third example is another consent decree violation, this time by the American Bar Association. In June 1995, the Department filed an antitrust lawsuit against the ABA, alleging that the ABA had allowed its law school accreditation process to be misused by law school personnel with a direct economic interest in the outcome of accreditation reviews. In 1996, the court entered an agreed-upon final judgment prohibiting the ABA from fixing faculty salaries and compensation, boycotting state-accredited law schools by restricting the ability of their students and graduates to enroll in ABA-approved schools, and boycotting for-profit law schools. The final judgment also required structural reforms and imposed

compliance obligations. In Spring 2006, the Department concluded after an investigation that the ABA violated six structural and compliance provisions in the 1996 consent decree over an extended period of time. In a stipulation, the ABA acknowledged the violations and agreed to reimburse the United States \$185,000 in fees and costs incurred in the Department's investigation.⁽²³⁾ At the same time, notwithstanding the violations, the Department did not seek to extend the term of the decree, which expired earlier this year.

Defendants certainly are entitled to defend themselves zealously and pursue all legal avenues to challenge or appeal an order. While the order is in force, however, the integrity of the process demands compliance. That said, reasonableness is important. An unduly severe penalty — whether in the form of an excessive fine or the extension of a decree that has outlived its purpose — can chill other procompetitive conduct and undermine the public confidence and support that is so vital to effective antitrust enforcement.

IV. Conclusion

In closing, let me return to my theme of the complementarity of intellectual property and antitrust. Intellectual property is a true property right, and as the Supreme Court has observed, "like any property right, its boundaries should be clear. This clarity is essential to promote progress, because it enables efficient investment in innovation."⁽²⁴⁾ Profit is the reward that encourages firms to invest, innovate, and compete through the mechanism of dynamic efficiency, and in the words of an eminent American jurist, Learned Hand, "[t]he successful competitor, having been urged to compete, must not be turned upon when he wins."⁽²⁵⁾ To antitrust lawyers, an *ex post facto* tinkering with a firm's product designs may be an interesting intellectual exercise, but "[b]usiness does not run this way"⁽²⁶⁾: firms making investment decisions seek clear, predictable rules as to how the intellectual property and antitrust regimes will function together — or interoperate. If a successful firm's rivals believe that a different product would create more consumer welfare, antitrust policy should encourage them to create that product — they should not find government regulators willing to eliminate the need to design it at all.

FOOTNOTES

1. See U.S. Dep't of Justice & Fed. Trade Comm'n, Antitrust Guidelines for the Licensing of Intellectual Property § 1.0 (1995) ("The intellectual property laws and the antitrust laws share the common purpose of promoting innovation and enhancing consumer welfare."), at <http://www.usdoj.gov/atr/public/guidelines/ipguide.pdf>.

2. See generally Gerald F. Masoudi, Intellectual Property and Competition: Four Principles for Encouraging Innovation, address at the Digital Americas 2006 meeting (Sao Paulo, Brazil, April 2006) 13-15, at <http://www.usdoj.gov/atr/public/speeches/215645.pdf>.

3. Joseph Schumpeter, *Capitalism, Socialism and Democracy* 84 (Harper Perennial 1976) (1942).

4. R. Hewitt Pate, Competition and the End of Geography, address before the Progress & Freedom Foundation (Aspen, Colorado, August 2005) 17-19, at <http://www.usdoj.gov/atr/public/speeches/205153.pdf>.

5. *A&M Records, Inc. v. Napster, Inc.*, 284 F.3d 1091 (9th Cir. 2002).

6. *Metro-Goldwyn-Mayer Studios Inc. v. Grokster Ltd.*, 545 U.S. 913, 125 S. Ct. 2764 (2005).

7. A typical complaint was that the ventures were "[a] blatant monopoly . . . allowing them to control the

price, the technology, and the use of the music being downloaded." Kelly Donohoe, *MusicNet & PressPlay: To Trust or Antitrust?*, 2001 Duke L. & Tech. Rev. 39 (2001), at <http://www.law.duke.edu/journals/dltr/articles/2001dltr0039.pdf>. A federal district judge reviewing these ventures at an early stage said, "[e]ven if it passes antitrust analysis, it looks bad, sounds bad, smells bad." John Borland, Jim Hu & Rachel Konrad, *Music Industry's Plans Spark Concern*, C/Net News.com (Oct. 19, 2001), at <http://news.com.com/2100-1023-274676.html>. The Department of Justice opened an investigation but, after the rise of Apple iTunes and other competing services, ultimately took no action and closed the investigation. See Press Release, U.S. Dept. of Justice, Statement by Assistant Attorney General R. Hewitt Pate Regarding the Closing of the Digital Music Investigation (Dec. 23, 2003), at <http://www.atrnet.gov/subdocs/201946.pdf>.

8. CBS News, Online Music Sales Hit Sour Note (Nov. 2, 2002), at <http://www.cbsnews.com/stories/2002/10/03/tech/main524304.shtml>.

9. Cyrus Wadia, The Department of Justice's Investigation into Online Music (Jan. 1, 2005), at <http://www.cwclaw.com/publications/articleDetail.aspx?id=56>.

10. Ina Fried & Daniel Terdiman, *Microsoft's Zune to Rival Apple's iPod*, C/Net News.Com (July 21, 2006), at http://news.com.com/2100-1041_3-6097196.html.

11. See Thomas Crampton, *For Apple, Europe Becoming a Tougher Customer*, Int'l Herald Trib., July 17, 2006, at 8.

12. *Id.*

13. Wade Roush, *DRM Under Siege: the Yahoo Music Experiment*, Technology Review, July 27, 2006, at http://www.technologyreview.com/read_article.aspx?id=17212&ch=infotech.

14. *E.g.*, *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 126 S. Ct. 1281 (2006).

15. Wikipedia, *Information Wants to be Free*, at http://en.wikipedia.org/wiki/Information_wants_to_be_free (visited September 6, 2006).

16. *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993) ("It is axiomatic that the antitrust laws were passed for 'the protection of competition, not competitors.'" (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962))).

17. *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407-08 (2004).

18. See generally Hearings on Section 2 of the Sherman Act: Single Firm Conduct as Related to Competition, at <http://www.ftc.gov/os/sectiontwohearings/index.htm>.

19. Thomas O. Barnett, The Gales of Creative Destruction: the Need for Clear and Objective Standards for Enforcing Section 2 of the Sherman Act, address before the Hearings on Section 2 of the Sherman Act 16-17 (Washington, D.C., June 20, 2006), at <http://www.usdoj.gov/atr/public/speeches/216738.pdf>.

20. *F. Hoffmann-La Roche Ltd. v. Empagran S.A.*, 542 U.S. 155, 165 (2004).

21. See Press Release, U.S. Dep't of Justice, Justice Department Settles Civil Contempt Claim Against Rolex Watch U.S.A. Inc. (February 28, 2006), at http://www.usdoj.gov/atr/public/press_releases/2006/214821.pdf.

22. See Press Release, U.S. Dep't of Justice, Qualcomm and Flarion Charged with Illegal Premerger

Coordination (April 13, 2006), *at* http://www.usdoj.gov/atr/public/press_releases/2006/215617.pdf.

23. *See* Press Release, U.S. Dep't of Justice, Justice Department Asks Court to Hold American Bar Association in Civil Contempt (June 23, 2006), *at* http://www.usdoj.gov/atr/public/press_releases/2006/216804.pdf.

24. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 730-31 (2002).

25. *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 430 (2d Cir. 1945).

26. Masoudi, *supra* note 2, at 3.

EXHIBIT 2

APPLE'S SHINING MOMENT The company hits the right notes with its new online music store and revamped iPods

BY MICHELLE MEGNA

Sunday, May 11th 2003, 1:03AM

It is 5 p.m. on a rainy Monday in SoHo. Hundreds of people are lining up in a slick stretch on Prince St. The vibe is reminiscent of the moment right after the lights go out at a concert and right before the band strikes the first note. By 5:45 p.m., a few folks are arguing with the bouncers and everyone is tired of waiting.

But this is not a celebrity-studded red-carpet premiere. It is not a rock concert or a fashion show. The main attractions tonight are the new iPod digital music players and iTunes Music Store, Apple's online service that offers 200,000 songs from the five major music labels for 99 cents a download. The vortex for all the commotion is the SoHo Apple Store, the company's largest retail operation. At 6 p.m., the doors open. By 6:28 p.m., 404 people are inside, and many are in line again, this time to buy an iPod loaded with iTunes.

The announcement of a new product from Steve Jobs' camp is always followed by Apple enthusiasts with evangelistic zeal. But the release of the slimmer, more powerful iPods and the maverick online music service is causing consumers, analysts and tech reporters to start testifying with resounding amens and hallelujahs. The reason: Apple is the first company to distribute music on the Internet in a way that pleases both users and the record companies. Copyright protection is built in, but it's not intrusive, expensive and limiting, as with other pay-to-play sites. The service seems to have already caught on; in the first week more than 1 million songs have been sold.

WINDOWS VERSION ON THE WAY

The iTunes Music Store is a free download that works with the jukebox software iTunes 4 and the iPod. Right now, the virtual store contains 200,000 songs, but Apple executives say it will be updated on an ongoing basis. And although the service works only with Macintosh computers, a Windows version is expected to be released by the end of the year. You can search the collection by keyword, artist, genre and so on. To hear a 30-second sample, you simply double-click on the track. Rather than pay a monthly fee, you pay 99 cents a song, which is purchased by clicking the "buy" button. Most albums are available for \$10, which is a lot less than the retail price of a standard CD. When you buy a song, it shows up in an instant, no shopping cart or basket pages to load, and is automatically added to your "Purchased Music" list and regular song library.

Once you buy a song, you can burn it to a CD. To prevent mass reproduction, however, only 10 copies can be made from the same playlist. While this will trouble music pirates, the average consumer isn't likely to be affected. You can also transfer your music to an iPod and listen to it on up to three Macintosh computers.

The files sold at the iTunes Music Store are in yet another format: Advanced Audio Code. While you may cringe to hear about a new acronym, this is what makes the site sing, because it allows Apple to include copyright protection without being heavy-handed about it. Like Microsoft's WMA files, AAC files take up less space than MP3 files and supposedly sound better, though I barely noticed the difference. Of course, the catch is that if you have a player that doesn't support AAC, or WMA for that matter, you have to burn the songs to a CD and then convert them to MP3 files.

A PROCESS MADE SIMPLE

The importance of Apple's pay service cannot be overstated. After the rise and fall of Napster, the recording business is still in a cat-and-mouse legal battle with the second-generation, free file-sharing sites. Pay services backed by the major labels, such as Pressplay, are woefully complicated and expensive. Subscribers pay a monthly fee, whether they download a song or not, and there are restrictions on how the music can be copied.

A Pressplay member pays \$10 a month for unlimited streams and downloads to a hard drive. For \$17.95, you get unlimited streaming/downloads and 10 portable downloads that can also be burned to a CD. However, if your membership expires, so does your music, unless you paid extra for portable downloads. In the end, it seemed, no one was happy, especially the consumer. But now, that could change.

Apple still holds just a minuscule share of the desktop computer market; estimates are 3% to 5%. But like Dr. Seuss' tiny, thriving community in "Horton Hears a Who!", this minority population doesn't seem to notice and certainly doesn't care, though it does make a lot of noise for the cause - and so should the rest of us.

EYE ON IPODS

[The iPod is the best-selling MP3 player because it looks chic and is easy to use. Here we highlight new features of the models released May 2:]

-Three sizes, three prices, one platform There are no longer different versions of the iPod for Windows and Macintosh. The new iPods are now compatible with USB 2.0, so they will work with a PC that doesn't have FireWire connectivity. The 10GB unit holds 2,500 songs and costs \$299, the 15GB model holds 3,700 songs and costs \$399 and the 30GB version holds 7,500 songs and costs \$499.

-Rock-a-bye baby The 15GB and 30GB units ship with a docking cradle that lets you sync with iTunes and use the iPod as an external hard drive. It also recharges the player and has a headphone jack/line-out port so you can connect it to your home stereo.

-Slim design The iPod is now less than an inch thick and weighs 5.6 ounces. Apple also added four lightup buttons for controls, in addition to the touch-sensitive scroll wheel.

-Customized options You can choose what features you want to appear on the top screen. Additionally, you can create playlists without using a computer; click on a track and it's added to a new list.

EXHIBIT 3

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Top 10 products

By Tom Merritt

Gadgets of every description have flowed through the doors of CNET for 10 years. Picking a list of the 10 best is an exercise in healthy but vocal arguments. Everyone has a different idea of what is meant by *best*. You can make great arguments for the Diamond Multimedia Rio 300, Mac OS X, the Sony PSP, and many more gadgets that aren't on our list. But the 10 we've included here had the most wide-ranging acceptance. Don't agree? Good. Tell us your top 10 in TalkBack.



iPod (2001)

No other product has had the incredible, loyal devotion that the iPod inspires. It's also one of only a handful of products to get a 9 rating from CNET. It revolutionized and popularized music players with its stylish design and is still considered the industry leader.

Even if you devoutly believe other music players have better features now, you have to acknowledge that iPod is still the king.

2 TiVo (1999)



It took a long time for people to even get the concept of what TiVo was. It has finally moved beyond "pausing live TV" to an entertainment-center essential that inspired a myriad of competitors, none of which even come close to having as good an interface. Plus, it has Linux inside, which gives it extraspecial geek points.

CNET community's Top 10 products

"Regarding the Newton any my favourite..."

by minilo (see profile)
September 18, 2005

Regarding the comment about the Newton in the entry for...
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"THE iPod!!!!!!?"

by Sephiroth965 (see profile)
September 17, 2005

I'll admit, the Ipod was a great product and helped MP3...
(read more)

"No DVD?????"

by MaxPete (see profile)
September 16, 2005
I am disturbed that

3 Google (1996)

This was a late addition to the

list because we almost overlooked it. Google has become so synonymous with search, you almost forget it has competitors. Google ended the need to use several search engines to get good results. The competition has slowly caught up, but Google is still the definitive search engine.

nothing related to DVD,
either the...
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4 Napster (1999)



Here's a product that wouldn't make the list in its current form, but the original version came close to deserving the phrase "changed the world." Everyone who used it in 1999 and 2000 loved it and became addicted. The Internet was filled with the sound of wailing and gnashing of teeth when the courts finally shut it down.

There's no doubt it changed the music industry forever and jump-started a series of events that has yet to come to a conclusion six years later.

5 Firefox (2004)



Sure, Mozilla has been around for many years, but Firefox 1.0 brought the open-source browser into the mainstream. Some never thought Mozilla could make it as anything more than a geek badge of pride. The light, secure, and efficient Firefox is legitimately challenging Internet Explorer's stranglehold on Web browsing.

6 PalmPilot (1996)



Some say PDAs are dying. The reason for that accusation is that you can now find PDA functionality in almost every mobile device, such as phones and music players. When PalmPilots first came out in 1996, they changed the way everyone thought about personal organization. It seems natural to have an electronic calendar in

the palm of your hand now, but that wasn't really true before 1996. No, we haven't forgotten the Newton, but that didn't really succeed, did it?

7 Motorola Startac (1996)



Motorola's cool flip phone helped cell phones finish the transition from big bricks to style statements. The Startac wasn't the first flip phone, but it was the first one everybody was willing to die for, it looked so small and cool. In its time, the Startac set mobile phone fans talking the way the Razr did this past year.

8 Apple iMac (1998)



The thought of an Apple computer being meaningful was laughable before the iMac. Apple had fallen on hard times, and some predicted its death. Now some of those same pundits say the iMac saved it. Whatever you think, the iMac set Apple on the road to dominating through style and functionality rather than sheer features and power.

9 Sony Digital Mavica MVC-HD5 (1997)



Think back to 1996, and you probably won't remember anyone who had a digital camera. Only true geeks, professionals, or the rich used anything without film. These days, it's hard to find a person with a film camera. The Sony Mavica helped usher in the digital camera era by making the devices affordable and easy to use.

10 The Sims (2000)



This may be the most controversial of the picks; so many games have changed the gaming world in the past 10 years. Doom, Ultima, Grand Theft Auto, and others deserve mention. But the Sims captured everyone's imagination--gamer or nongamer. It crossed boundaries that few other games have, and it's still one of the top-selling games of all time.

All editors' top 10 lists

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Top 10 downloads	Biggest dot-com flops	Top 10 worst products
Tech we miss	Sexiest gadgets	

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Product of The Year Apple iTunes Music Store

By Peter Lewis
December 22, 2003

(FORTUNE Magazine) – Napster proved that tens of millions of consumers were eager to download digital music from the Internet. They just weren't inclined to pay for it, which led music companies to believe that the Internet was the superhighway to ruin and that most Internet users were thieves. All of which makes the achievement of Apple's iTunes Music Store impressive from both a diplomatic standpoint and a technical one.

Apple CEO Steve Jobs persuaded the five major music labels and scores of independent labels to open their vaults (at least partially). Together they put more than 400,000 songs on sale at 99 cents each, or \$9.99 for a typical album. Consumers benefited ethically, by having a viable alternative to stealing music; and aesthetically, by being able to search for, preview, and download music with unprecedented ease. Unlike most rival services, the iTunes Music Store gives customers the freedom to store music indefinitely, burn custom CDs, and transfer songs to the Apple iPod portable player. (The iTunes Music Store is not just about music; it also sells audio books.)

Although you don't need an iPod to use the iTunes Music Store, Apple needs the iPod to make the Music Store profitable: the company makes chump change from music sales but big profits from sales of the phenomenally successful hardware. Apple's success has jazzed up the competition, ranging from Roxio's reformed Napster service to the new Dell Music Store. Microsoft, Yahoo, Amazon, and even Wal-Mart are expected to join the me-too chorus with similar services. Apple countered by forming an alliance with AOL (which, like FORTUNE's parent, is a division of Time Warner). With the success of its iTunes Music Store, Apple is almost single-handedly dragging the music industry, kicking and screaming, toward a better future.

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EXHIBIT 5

Napster Blames Microsoft for Failures

By Ed Oswald, BetaNews

March 1, 2006, 1:40 PM

Napster chief executive Chris Gorog took Microsoft to task Tuesday, telling Reuters that Microsoft and its hardware partners were to blame for his company's inability to make headway against market leading iTunes. Recent surveys show Apple's music software has more than 80 percent of the market, with that number continuing to rise.

Gorog called Microsoft's execution "less than brilliant" and said that technical glitches with the company's digital rights management technology was hurting Napster's business.

Napster relies on Microsoft's digital music ecosystem and its PlaysForSure technology, which has continued to sputter in the face of strong competition from Apple with the iPod and iTunes.

Gorog did admit, however, that Microsoft's task of dealing with a multitude of services and device makers makes the Redmond's company's job a lot tougher.

"It's a lot more complex to get organized properly than it is to build one device and one service as Apple has done," Gorog told Reuters. "It's always been painful at the introduction of new technologies. But it always takes shape like it's done in the past."

Even after publicly criticizing Microsoft, Gorog then went on to say he expected the "Microsoft ecosystem" to eventually come out on top, noting that all the big name manufacturers would "come to the Windows Media party."

"Microsoft and its partners still have kinks to work out with respect to rights management and seamless, reliable transfer to portable devices. Apple got this right the first time," Jupiter Research senior analyst Joe Wilcox commented to BetaNews.

"Additionally, time is long past for Windows Media partners -- Microsoft, device makers and music stores -- to do some serious marketing; at the least, they need to equal Apple's noise."

People are not looking at the big picture, Gorog says, saying only five percent of music sales were now digital. The Napster CEO said he expects the industry to be a lot different within 12 to 24 months.

Gorog also took the time to dispel rumors of a sale, saying that while the company had received offers to unload assets, it was not interested. He also admitted Napster itself had made some missteps in articulating the value of the business.

The company's losses widened last quarter, reaching \$17 million versus \$12.8 million the year before. Revenue nearly doubled, however, reaching \$23.5 million, which is up from \$12.1 million the year previous.

In a statement, Microsoft's director of Windows Digital Media Kevin Unangst said, "We're seeing higher than ever demand for Windows Media Player and PlaysForSure devices, and Windows Media Player 11 and Windows Vista will provide incredible music experiences when released later this year."

"In fact, Chris's own assessment was that a strategy of choice is the right approach in the long term," Unangst added.
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